

August 24, 1956.

Dr. Gladys L. Hobby,  
Chas. Pfizer Labs.,  
Brooklyn, N.Y.

Dear Dr. Hobby,

Lately, we have been developing a method for the isolation of biochemical mutants in bacteria which depends in part on the bactericidal action of penicillin. Unfortunately, I've been especially interested in *E. coli* and other gram-negatives, and of course very high concentrations have been needed. More disturbing, however, has been a very considerable variability in our results; using similar media and inocula, young growing cultures of *coli* are very rapidly sterilized some days and not others. If you would, I would appreciate your help in the following respects:

- 1). Suggestions, if any, of other antibacterial agents which show a differential bactericidal effect on growing and resting populations, especially for *E. coli*.
- 2). Suggestions from your own experience with *coli* or with *Staph* on detailed conditions for bactericidal effects with penicillin, and
- 3) reprints, as available, of your papers which deal with this question.

I would be very grateful for this assistance.

With best regards,

Yours sincerely,  
Joshua Lederberg  
Assistant Professor of Genetics.